

ABSTRACT OF THE DISCLOSURE

Disclosed is a high-precision cog measuring instrument having a constitution wherein warping is unlikely and not easily transmitted. A high-precision cog system measuring instrument having as its operating axes an X axis, a Y axis, and a Z axis, which are at right angles to each other, the device moving an object to be measured parallel to the X, Y, and Z axes, and in addition, rotating it around the Z axis, while measuring the external shape of the object to be measured, the device comprising a main body, comprising a base, secured to an installation face where the high-precision cog system measuring instrument is to be installed; a Y-direction moving table, which is mounted on the base and can move in one horizontal direction; and an X-direction moving table, which supports a measuring element and can move in another horizontal direction at a right angle to the Y-direction moving table; a body for supporting the object to be measured having a section for supporting the object to be measured, which can move in the Z axial direction and rotate around the Z axis, the object to be measured being supported by the section for supporting the object to be measured, and the measuring element being positioned so as to be able to touch the object to be measured and attain a free angle with respect to the installation face; and a connecting part, which can secure the body for supporting the object to be measured to the main body in such a manner as to allow them to be finely adjusted.